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Supplemental Information

Human Galectin-1 Improves Sarcolemma Stability

and Muscle Vascularization in the mdx Mouse

Model of Duchenne Muscular Dystrophy

Ryan D. Wuebbles, Vivian Cruz, Pam Van Ry, Pamela Barraza-Flores, Paul D. Brewer, Peter Jones, and Dean J. Burkin



Supplemental Figure Legends

Figure S1. Activity Parameters examined at 10 weeks of age in mdx mice treated with PBS or 5, 20, or 50 mg/kg rHsGal1. Mice were assessed for 30 minutes for distance traveled (A), resting time (B), and number of vertical breaks (C).



Figure S2. Immunofluorescence staining for sarcolemma stabilizing α 7 Integrin, β 1D Integrin, β -Dystroglycan, and Utrophin proteins in the *mdx* mouse treatment groups.



Figure S3. Gastrocnemius sarcolemma protein levels of *mdx* treated with PBS or 5, 20, and 50mg/kg rHsGal1. Representative western blots of different treatments probed with α7A Integrin (A), β-Dystroglycan (B), Utrophin (C), α7B Integrin (D), and GapDH (E). Quantification of Utrophin (F) and α7B Integrin (G) western blots normalized to GapDH.



Figure S4. Mice exhibit IgG response to rHsGal1 treatments. (A) ELISA-based assessment of α -rHsGal1 IgG serum levels in mdx mice treated with 5 mg/kg (n=5), 20 mg/kg (n=6), and 50 mg/kg (n=5) rHsGal1 normalized to PBS (n=6) controls. (B) Representative IF images of staining for total mouse IgG in *mdx* mouse TA muscle cryosections treated with PBS or 5, 20, or 50 mg/kg rHsGal1.



Figure S5. Activity, grip strength, and body weight from 7 and 11 week old *mdx* mice treated with PBS or 2.5mg/kg rHsGal1 by IV injection. Activity data was collected from treated animals and assessed for distance traveled (A, F), resting time (B, G), and verticle counts (C, H) at 7 and 11 weeks, respectively. Grip strength assessment (D, I) and body mass (E, J) were also assessed at 7 and 11 weeks of age.